

coincide closely with the narrowband deadline of January 1, 2013. Additional time is necessary to ensure that the implementation is completed in a manner that acknowledges the life-safety nature of the communications.

I. BACKGROUND

The County of Northumberland is located in the central region of the Commonwealth of Pennsylvania. Northumberland County comprises 477 square miles, and is bordered by nine of the Commonwealth's 67 counties. The county's 94,528 full-time residents have access to a state-of-the-art 9-1-1 system³ operated by the Northumberland County Department of Public Safety, and receive service from the county's 14 law enforcement agencies, 52 fire companies, and six emergency medical agencies. Additionally, the Northumberland County Department of Public Safety provides services to the County Sheriff's Department, County Coroner's Office, and magisterial district judges.

Given the population density of the county, full or part-time law enforcement services are provided to only 10 of the county's 36 townships, boroughs, and cities as detailed in Appendix A. Where full or part-time law enforcement protection does not exist, the Pennsylvania State Police have jurisdiction and provide police protection. Furthermore, the Pennsylvania State Police provide mutual aid (backup) services to the county's police departments when necessary, and vice versa.

The 9-1-1 Division of the County Department of Public Safety provides alerting and radio dispatch services via voice radio systems operating in the VHF-High and UHF bands to agencies throughout the county. Between all disciplines, it is estimated that approximately 700 subscriber units (portable, mobile, and control stations) are in operation on various frequencies. Of the 17 base stations in use for law enforcement and emergency medical services communications, none are narrowband-capable and must be replaced.

³ Northumberland County 9-1-1 ("the Division"), a division of the Department of Public Safety, was established in the early 1990s and became fully operational September 7, 1995.

II. SCOPE OF THE WAIVER REQUEST

The County has been committed to and planned for the replacement of its aging communications infrastructure for nearly three years, as will be described in subsequent sections. Although the timeline for completion of this replacement will coincide closely with the narrowband deadline of January 1, 2013, additional time is necessary to ensure that the implementation and transition of agencies is completed in a manner that acknowledges the life-safety nature of the communications it facilitates.

The crucial need for interoperability between the Pennsylvania State Police and local agencies has added greatly to the complexity of narrowband compliance in Northumberland County. The transition of the Pennsylvania State Police to the 800 MHz Pennsylvania Statewide Radio Network (PA-STARNET) has been delayed due to coverage issues involving terrain, as well as planned and unplanned outages.⁴ As a result, the Pennsylvania State Police have additionally filed a waiver with the Commission seeking relief from the narrowbanding deadline.⁵

In the rural areas of Pennsylvania such as Northumberland County, law enforcement officers are responsible for large patrol areas, and often rely on assistance from other agencies for mutual aid and large-scale events. Of the sixteen State Police regions (troops) in the Commonwealth, the region that encompasses Northumberland County (Troop F) has the largest area, totaling nearly 5,000 square miles. Two of the region's seven state police barracks are located in Northumberland County, more than any other county in the region. Overall, the Pennsylvania State Police provide primary police coverage for nearly 70 percent of Northumberland County as shown in Appendix C. Interoperability between local law enforcement agencies and the State Police is vital for the protection of citizens.

The Pennsylvania State Police currently rely on their legacy, wideband-only equipment for interoperability⁶, and will do so until December, 2014 when all of their 2,500 mobile radios are replaced.⁷ Given this crucial need for interoperability that has been identified by the Pennsylvania State Police, and

⁴ Pennsylvania State Police Waiver Request at 4.

⁵ See Request for Waiver of Commission Rules, filed January 25, 2012, by the Pennsylvania State Police.

⁶ Pennsylvania State Police Waiver Request at 4.

⁷ Pennsylvania State Police Waiver Request at 6.

is affirmed by the Department of Public Safety, a waiver of the narrowband deadline in the instant case would clearly be in the public interest.⁸

Replacement of all of the subscriber equipment in the county with narrowband-capable units prior to January 1, 2013 would negatively impact operational readiness, mutual aid, and interoperability. In this circumstance – if Northumberland County subscriber and infrastructure equipment was narrowband-compliant, Pennsylvania State Police units would be unable to monitor vital traffic, and would be seriously limited in the number of frequencies available for interoperability. Alternatively, to overcome the issue of limited interoperability, Northumberland County would be required to install two base stations per fixed site – one in narrowband configuration, and one in wideband configuration. This scenario would also be unduly burdensome on the County.⁹

The County is firmly committed to completing the transition of affected agencies no later than March 1, 2014, and in turn meeting the requirements of the rule on all authorizations detailed in Appendix B. Although a transition date of March 1, 2014 would occur prior to the transition of the Pennsylvania State Police, it is anticipated that the majority of mobile radio equipment in use by the Pennsylvania State Police in the Northumberland County region will have already been transitioned.

Funding for the replacement of the communications infrastructure is planned to come from the issuance of a municipal bond. This security requires substantial governmental planning that is already in discussion, but cannot be formalized until a full system design is finalized. Furthermore, replacement of subscriber equipment will likely be required in the majority of agencies, and this replacement must be coordinated over a multi-year budget process, again once the system design is finalized.

It should be noted that no waiver is necessary or sought with respect to the County's fire services – which represent the majority of the subscriber and infrastructure equipment – as these agencies operate in bands other than the affected VHF/UHF spectrum. It is reasonable that given the scope of this project, a waiver of the Commission's rule extending the narrowband deadline for an additional 15 months would

⁸ 47 C.F.R. § 1.925(b)(3)(i).

⁹ 47 C.F.R. § 1.925(b)(3)(ii).

not represent an amount of time more than is reasonably necessary to complete the narrowbanding process.¹⁰

III. STEPS TAKEN PRIOR TO JANUARY 1, 2013

The master planning process for the replacement of the County's aging communications structure has been complicated by a number of factors, namely the disparate nature of dispatch operations that exists within its boundaries and numerous discontinuities of governance.

Throughout Northumberland County, 11 of the 36 municipalities receive dispatch services from the neighboring counties of Montour or Union. These agencies seek services outside of their jurisdictional county primarily due to poor communications coverage from the Northumberland infrastructure. The leadership of the County Department of Public Safety recognized in 2009 that an upgraded communications infrastructure would be required to provide acceptable coverage to all agencies within the county, to include those agencies that had sought dispatch services elsewhere.

As a result, in 2010 a committee of representatives from first responder agencies was established to begin planning for narrowband compliance, as well as develop a long-term strategy for communications improvements. Then, in early 2011, the County commissioned a comprehensive study of its current radio infrastructure¹¹, specifically to assess readiness for compliance with the narrowband deadline. One task of the study solicited designs and cost proposals from vendors to bring all current systems into compliance. The results of that study were published in August, 2011, and the leadership of the Department of Public Safety subsequently completed an assessment of the vendor proposals.

Throughout the last four years, however, the Department of Public Safety has not maintained continuity in governance, experiencing a change in leadership four times during the narrowband planning project. The planning tasks, financial expenditures, and effort by outside firms to move toward timely

¹⁰ Wireless Telecommunications Bureau, Public Safety And Homeland Security Bureau, And Office Of Engineering And Technology Provide Reminder Of January 1, 2013 Deadline For Transition To Narrowband Operations In The 150-174 MHz And 421-512 MHz Bands And Guidance For Submission Of Requests For Waiver And Other Matters, *Public Notice*, 26 FCC Rcd 9649 (2011) (*Narrowbanding Waiver Guidance Notice*).

¹¹ Northumberland County PA Needs Assessment, August 2011

completion of the narrowband process have not been trivial or superficial, though. The steps taken by the Department of Public Safety personnel have involved significant investments of time and effort, and have been made in good faith to timely comply.

IV. PROPOSED TIMETABLE FOR COMPLETION OF NARROWBANDING

As described in the prior section, the County has worked diligently and in good faith toward the goal of modernizing and unifying its disparate communications systems, meeting the narrowband deadline, and upgrading technology department-wide. This progress has, however, not been without unique and unusual circumstances – namely numerous changes in leadership throughout the period – that have delayed key milestones in the process and ultimately leave the County with no reasonable alternative to timely meet the narrowband requirement.¹²

In order to regain the momentum of the project, the County has retained a public safety consultancy to manage the communications upgrade and ensure timely progress toward future milestones. These key milestones include, (i) finalizing frequency application efforts to secure sufficient spectrum for construction of the upgraded network by June 1, 2012, (ii) issuing a comprehensive Request for Proposals (RFP) for the replacement of all non-narrowband compliant equipment by September 30, 2012, (iii) assessing the proposals received and awarding a contract by January 1, 2013.

Implementation of the upgraded communications network infrastructure is expected to occur rapidly due to the limited complexity of the design and the resources available to expedite deployment. Full system implementation and acceptance testing will be completed by July 31, 2013. Finally, complete subscriber transition to the new network will be completed no later than March 1, 2014. In summary:

Task	Completed By
Complete spectrum applications	June 1, 2012
Issue Request for Proposals	September 30, 2012
Award contract	January 1, 2013
Acceptance Testing Complete	July 31, 2013
Complete subscriber transition	March 1, 2014

¹² 47 C.F.R. § 1.925(b)(3)(ii).

The replacement network is anticipated to be both fully interoperable with the Pennsylvania State Police, and fully compliant with APCO Project 25 standards.

V. IMPACT ON CO-CHANNEL AND ADJACENT CHANNEL LICENSEES

Given the limited number of frequencies that are sought for relief and the limited area of operation, a grant of the waiver in the instant case will not have a negative impact on any other public safety licensees. An examination of all co- and adjacent channel licenses impacted by the County's service contours has been conducted, and the County is not aware of any agency, project, or effort that will be negatively impacted if the waiver in the instant case is granted.

In the event that any negative impact results from continued wideband operations during the waiver period, the County commits to transitioning users from the wideband, interference-causing frequencies to other operational wideband frequencies that do not cause a negative impact.

VI. CONCLUSION

For the reasons set forth herein, the Northumberland County Department of Public Safety believes that it has satisfied all of the requirements for granting a waiver and extension of the narrowband deadline. Therefore, as the sole licensee covered by this waiver request, the Department hereby requests that the Commission grant the waiver relief sought herein for the radio station authorizations listed in Appendix B.

Respectfully submitted,

/s/

Jerome Alex, Director
Northumberland County Department of Public Safety
911 Greenough Street, Suite No. 2
Sunbury, PA 17801
(570) 988-4394

APPENDIX A

AFFECTED PUBLIC SAFETY AGENCIES IN NORTHUMBERLAND COUNTY

Law Enforcement

Coal Township
Milton Borough
Mount Carmel Borough
Mount Carmel Township
Northumberland Borough
Point Township
Ralpho Township
Shamokin City
Sunbury City
Watsonstown Borough
Kulpmont Borough
Lower Mahanoy Township
Riverside Borough
Zerbe Township
Northumberland County Sheriff
Northumberland County Coroner

Emergency Medical Services

Mount Carmel
Shamokin Borough
Northumberland Borough
Elysburg Police
Sunbury City

APPENDIX B

FCC RADIO STATION AUTHORIZATIONS SEEKING RELIEF

Licensee	Call sign	Use	Frequencies (MHz)			
Northumberland, County of	KNNK577	Law Enforcement	154.650	155.490	453.600	
			155.100	155.610	453.750	
			155.250		458.600	
			155.415		458.750	
			155.475			
Northumberland, County of	WPIE981	Emergency Medical	463.000	463.125	468.000	468.125
			463.025	463.150	468.025	468.150
			463.050	463.175	468.050	468.175
			463.075	462.950	468.075	467.950
			463.100	462.975	468.100	467.975
Northumberland, County of	WPSS271	Sheriffs	151.355			
			159.135			

APPENDIX C

PENNSYLVANIA STATE POLICE PRIMARY POLICE COVERAGE

